Owner's Manual & Assembly Instructions

| Roof Beef-Up Kit | |
|-------------------|--|
| Model No. RBK6586 | FOR 6x5 & 8x6 BUILDINGS |
| RBK10610 | FOR 10x6, 10x8, 10x9 & 10x10 BUILDINGS |
| RBK1012 | FOR 10x12 BUILDINGS |
| RBK1014 | FOR 10x13 & 10x14 BUILDINGS |
| 697.68207 | FOR 10x6, 10x8, 10x9 & 10x10 BUILDINGS |

This Roof Beef Up Kit is required to meet certain building code requirements relating to snow load factors. It accomplishes this by providing additional roof beams and gable braces. The parts provided in the kit are related to the standard model building so you should refer to both the standard assembly instructions and this booklet when assembling your building. Various parts must be notched as shown in the following steps, prior to assembly on the building. Wear work gloves, eye protection and long sleeves when cutting and handling the metal parts.

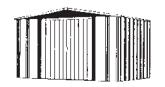
NOTE

This kit may be installed in buildings that have already been constructed. It will be necessary to remove the roof panels to accomplish this.

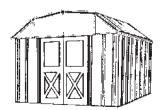
Parts and Parts List: Check to be sure that you have all the necessary parts for your Roof Beef Up Kit.

- All part numbers can be found on the parts. All of these numbers must agree with the numbers on the parts list.
- If you find that a part is missing, include the model number of this kit and contact:

Arrow Group Industries, Inc. Customer Service Department Route 50 East Breese, Illinois 62230 1-800-851-1085









Parts List

RBK6586

| Assembly | Part | Part | Quantity | Check |
|----------|--------|-----------------------|-----------|-------|
| Key No. | Number | Description | in Carton | List |
| 1 | 9735 | Roof Beam 1x2 37 3/4" | 6 | |

RBK10610 697.68207

| Assembly | Part | Part | Quantity | Check |
|----------|--------------|--|-----------|-------|
| Key No. | Number | Description | in Carton | List |
| 1 2 | 6636 9736 | Gable Brace 23 7/8" Roof Beam 1x4 60 5/8" | 8 12 | |

RBK1012

| Assembly Key No. | Part Number | Part Description | Quantity in Carton | Check List |
|---------------------|----------------|------------------------|-----------------------|---------------|
| 1 | 6636 | Gable Brace 23 7/8" | 8 | |
| 2 | 9737 | Roof Beam 1x4 142 3/8" | 6 | |

RBK1014

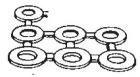
| Assembly | Part | Part | Quantity | Check |
|----------|--------|------------------------|-----------|-------|
| Key No. | Number | Description | in Carton | List |
| 1 | 6636 | Gable Brace 23 7/8" | 8 | |
| 2 | 6314 | Roof Beam 1x4 159 3/8" | 6 | |

Hardware









| 65004 | | | | |
|---------------------|-------|--|--|--|
| #8Ax5/16" Screw | | | | |
| RBK6586 | (16) | | | |
| RBK10610, 697.68207 | (17) | | | |
| RBK1012 | (104) | | | |
| RBK1014 | (25) | | | |
| | | | | |

| 65103 |
|---------------|
| #8-32 Hex Nut |
| (31) |
| , , |
| (66) |
| (54) |
| (54) |
| |

65923 #8-32x3/8" Bolt (31) (66) (54) (54)

| 66646 |
|-------|
| Washe |
| (160) |
| (240) |
| (240) |
| (320) |



(241)

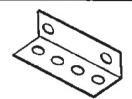
66611 #10Ax1/2" Screw RBK6586 (62) RBK10610,697.68207 (171) RBK1012 (54)

RBK1014

These larger screws are only required for buildings that have already been constructed and it was necessary to remove the roof panels. Where a #8Ax5/16" screw was removed, replace with a #10Ax1/2" screw.



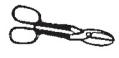
67293/67545
Weather Stripping
(1)/(0)
(1)/(1)
(0)/(1)
(1)/(2)



7916 Gable Brace (4)

Tools

The following tools are required to complete the installation of this Roof Beef Up Kit in your building in addition to those listed in the standard manual for this building.







Tin Snips (Heavy Duty)

Drill

Drill Bits 7/32" - 3/32" Diameters

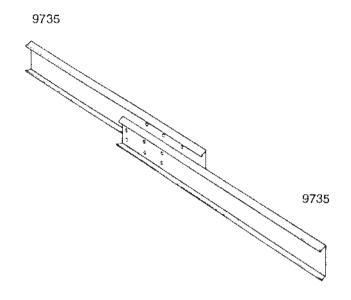
The roof beams join the two gables and support the roof panels. Proceed as follows:

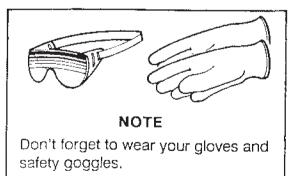
NOTE

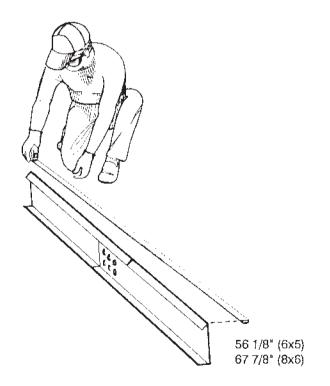
The roof beams packed with the standard building and additional roof beams packed with this kit *must* be used, to accomplish installation.

Hint: These pieces are force-fitted, so you may have to press hard to join them together.

1 Place the end of a **roof beam** inside another **roof beam**. Telescope them to a length of 56 1/8" for the 6x5 building or 67 7/8" for the 8x6 building, so that six holes in each piece align. Make three sets of roof beams by repeating this procedure. Do not fasten together at this time.







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NOTE

This step to be done in conjunction with Steps #8 and #9 in the standard assembly instructions for the 6x5 building and #12 & #13 for 8x6 building.

REMINDER

If your building has already been constructed, at this point you must remove roof panels.

1 Install gables as outlined in the standard assembly instructions for your building.

2On the 6x5 and 8x6, install the **beef up roof beam assembly**, back-to-back, in place of the roof angle from the standard building as outlined in the assembly instructions for your building. Use bolts and nuts to fasten the roof beams to the legs of the gables and braces. Using the six holes in the beef up beam as a guide, with a 7/32" diameter drill bit, drill through the six holes, and fasten beams together using six bolts and nuts.

3On the 6x5, position **gable brace** 16 3/4" over from the main center roof beam on inside of the gable with leg pointing toward the center of the building. Mark two holes and with a 7/32" diameter drill bit, drill two holes into the face of the gable. See diagram for location.

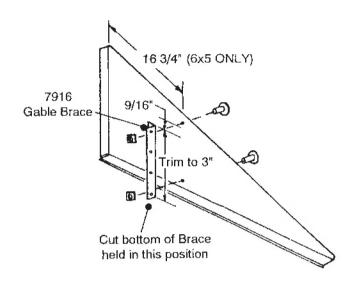
4On the 6x5, fasten **gable brace** to the gable using two bolts and nuts.

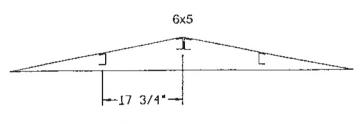
NOTE

Repeat item #3 and #4 on the other three gables

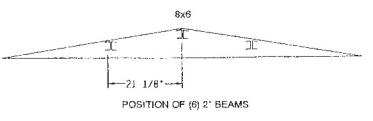
5On the 6x5, fasten remaining beef up roof beam assemblies to the gable braces using bolts and nuts. Fasten six aligned holes on beam, using bolts and nuts.

6On the 8x6, position the **beef up roof beam assemblies**, back-to-back, with the roof beam from the standard building as outlined in the assembly instructions for your building. Use bolts and nuts to fasten the roof beams to the legs of the roof beam brackets. Using the six holes in the beef up beam as a guide, with a 7/32" diameter drill bit, drill through the six holes, and fasten beams together using six bolts and nuts.





POSITION OF (4) 2" BEAMS



Roof Panel Installation

NOTE

Each screw and bolt in the roof requires a washer

NOTE

If your building has already been constructed and you had to remove the roof panels, use the larger #10Ax1/2" screws to replace the #8Ax5/16" screws that were removed

1 Using Step #10 in the standard assembly instructions for the 6x5 as a guideline, or Step #14 in the 8x6, install a right roof panel at the back right corner of the building.

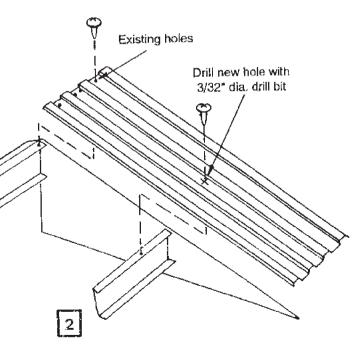
2Fasten this right roof panel to the main roof beam assembly (6x5 & 8x6 labeled #1 in the diagram), and to the double roof beam in the 8x6, using screws and washers.

3On the 6x5, using a 3/32" diameter drill bit, drill a hole through the roof panel and into the roof beam (labeled #2 in the diagram). Fasten the roof panel to the roof beam in this new hole using a screw and washer.

4Install the remainder of the roof panels as outlined in Steps #11 and #12 of the standard assembly instructions for 6x5 building, or Step 15 for the 8x6 building, with the following exception.

NOTE ON THE 6x5

As described in item #3 of this step you *must* drill 3/32" diameter holes and fasten with #8Ax5/16" screws and washers to the additional roof beams labeled #2 in the diagram.



Parts Needed For •Roof Beam Assemblies

9736 Roof Beam (twelve)

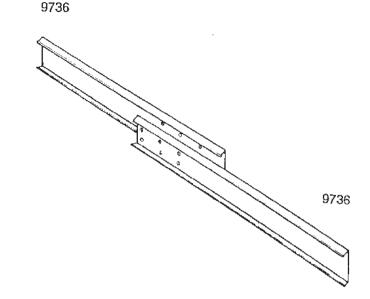
The roof beams join the two gables and support the roof panels. Proceed as follows:

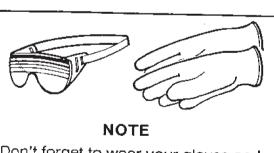
NOTE

The roof beams packed with the standard building and additional roof beams packed with this kit *must* be used, to accomplish installation.

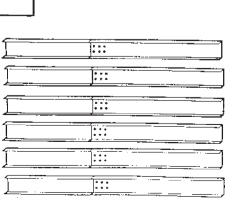
Hint: These pieces are force-fitted, so you may have to press hard to join them together.

1 Place the end of a **roof beam** inside another **roof beam**. Telescope them to a length of 67 7/8" for the 10x6, 91 7/8" for the 10x8, 104 1/8" for the 10x9, or 113 5/8" for the 10x10 building, so that six holes in each piece align. Make six sets of roof beams by repeating this procedure. Do not fasten together at this time.





Don't forget to wear your gloves and safety goggles.



67 7/8" (10x6) 91 7/8" (10x8) 103 15/16" (ES109, 697.68171) 104 1/8" (10x9) 113 5/8" (10x10)

Parts Needed For ●

Roof Beam Installation

- 6636 Gable Brace (eight)
- Roof Beam Assemblies (six)

NOTE

This step to be done in conjunction with Steps for Gables/Braces and Roof Beams in the standard assembly instructions for your building.

REMINDER

If your building has already been constructed, at this point you must remove roof panels.

1 On the 10x6, 10x8, 10x9 & 10x10 Low 9"Gable, install gables as outlined in the standard assembly instructions for your building.

2Position **gable brace** 16" and 45 1/2" over from the main center roof beam on inside of the gable with leg pointing toward the center of the building. Cut gable brace to appropriate dimension shown, using tin snips. Mark two holes and with a 7/32" diameter drill bit, drill two holes into face of the gable. Fasten gable brace to the gable using two bolts and nuts. See diagram.

NOTE

Repeat item #2 on the other three gables.

3Fasten beef up roof beam assemblies to the gable braces, using bolts and nuts. Notch beam at 451/2". Fasten six aligned holes on beam, using bolts and nuts.

4Position the remaining beef up roof beam assemblies, back-to-back, with the roof beam from the standard building as outlined in the assembly instructions for your building. Use bolts and nuts to fasten the roof beams to the legs of the roof beam brackets. Using the six holes in the beef up beam as a guide, with a 7/32" diameter drill bit, drill through the six holes (where needed), and fasten beams together using six bolts and nuts.

1 On the 10x8 & 10x9 High 17 1/2" Gable, follow Steps
#1 through #4 above with the following exception. Position
gable brace 13 3/4" and 43 1/4" over from the main
center roof beam on inside of the gable with leg pointing
toward the center of the building.

Mork through #4 above with 17/20" If the state of the state of the building.

Mark three holes and with a 7/32" diameter drill bit, drill three holes into face of gable. Fasten gable brace to the gable using three bolts and nuts.

45 1/2" (Lo Gable) 43 1/4" (Hi Gable) 16" (Lo Gable) 13 3/4" (Hi Gable) 9/16" Trim to 6.3/8* (Lo Gable) 13 1/4" 9/16* (Hi Gable) Standard Beam Cut bottom of Brace held in this position Trim to 1 15/16* (Lo Gable) 4 1/2" (Hi Gable) 6636 Gable Brace **Roof Beam Assembly** Roof Beam Assembly NOTCH BEAM 6636 Drill 6 holes along length 10x6 LOW GABLE POSITION OF (6) 4" BEAMS, (3) 2" BEAMS & ANGLE

10x8, 10x9 HIGH GABLE

10x8, 10x9, 10x10 LOW GABLE

Parts Needed For •

Roof Beam Installation

- 6636 Gable Brace (four)
- Roof Beam Assemblies (six)

f 1On the 10x8 & 10x9 High Gambrel, install gables as outlined in the standard assembly instructions for your building.

2Position gable brace 14 5/8"on the 10x8 & BF109 (24 1/4" on the 10x9) over from main center beam on inside of gables with leg pointing toward the center of the building. Mark three holes and with a 7/32" diameter drill bit, drill three holes into the face of the gable. Fasten gable brace to the gable using three bolts and nuts.

NOTE

Repeat item #2 on the other three large gables.

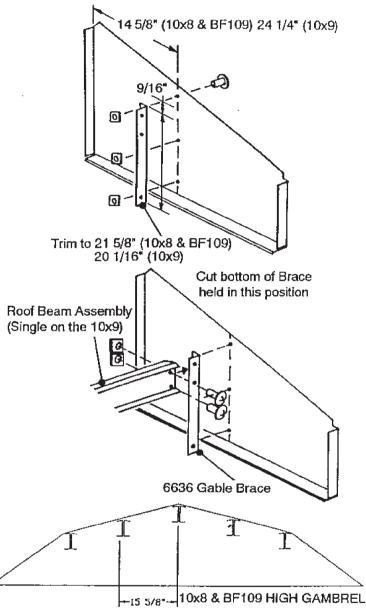
3On the 10x8 & BF109, fasten two beef up roof beam assemblies, back-to-back, to the gable brace, using bolts and nuts. Repeat on opposite side of building.

4On the 10x8 & BF109, position the remaining **beef up** roof beam assemblies, back-to-back, with the roof beam from the standard building as outlined in the assembly instructions for your building. Use bolts and nuts to fasten the roof beam to the legs of the roof beam brackets.

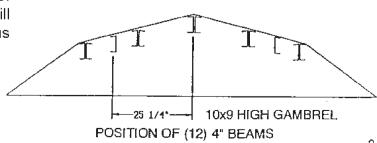
50n the 10x9, fasten single beef up roof beam assembly to the gable brace, using bolts and nuts. Repeat on opposite side. Fasten beams at six holes.

6On the 10x9, position the remaining beef up roof beam assemblies, back-to-back, with the roof beams from the standard building as outlined in the assembly instructions for your building. Use bolts and nuts to fasten the roof beams to the legs of the roof beam brackets.

Note: On items 3, 4 & 6, using the six holes in the beef up beam as a guide, with a 7/32" diameter drill bit, drill through the six holes (where needed), and fasten beams together using six bolts and nuts.



POSITION OF (10) 4" BEAMS



Parts Needed For ● Roof Beam Installation

- 6636 Gable Brace (eight)
- Roof Beam Assemblies (six)

1 On the ES109 & 697.68171, install gables as outlined in the standard assembly instructions for your building.

2Position gable brace 10 3/4" and 33 1/4" over from main center beam on inside of gables with leg pointing toward the center of the building. Mark three holes and with a 7/32" diameter drill bit, drill three holes into the face of the gable. Fasten gable brace to the gable using three bolts and nuts.

NOTE

Repeat item #2 on the other three gables.

3On the ES109, fasten single **beef up roof beam assemblies**, to the **gable braces**, using bolts and nuts. Repeat on opposite side of building.

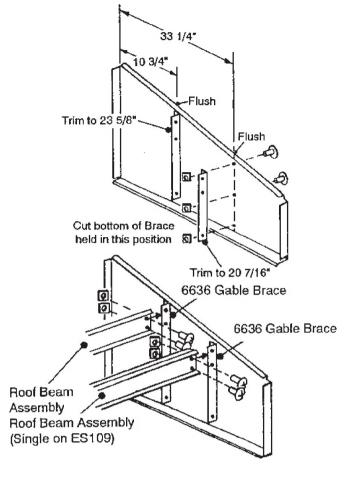
4On the ES109, the remaining **beef up roof beam assemblies**, replace the standard 2" beams at the break between gables (with small holes up). Install the two 2" beams back-to-back with the other 2" beams at the 23 3/4" location.

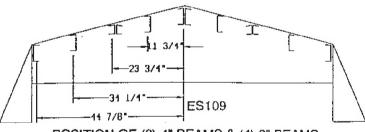
5On the 697.68171, fasten single **beef up roof beam assembly** to the **gable brace** (at 10 3/4") using bolts and nuts. Repeat on opposite side of building.

6On the 697.68171, position the remaining **beef up roof beam assemblies**, back-to-back, to the **gable brace** (at 33 1/4") using bolts and nuts. Repeat on opposite side of building.

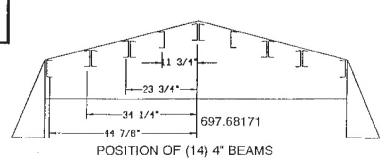
NOTE

On items 3, 4, 5 & 6, using the six holes in the beef up beam as a guide, with a 7/32" diameter drill bit, drill through the six holes (where needed), and fasten beams together using six bolts and nuts.





POSITION OF (8) 4" BEAMS & (4) 2" BEAMS



Roof Panel Installation

NOTE

Each screw and bolt in the roof requires a washer

If your building has already been constructed and you had to remove the roof panels, use the larger #10Ax1/2" screws to replace the #8Ax5/16" screws that were removed

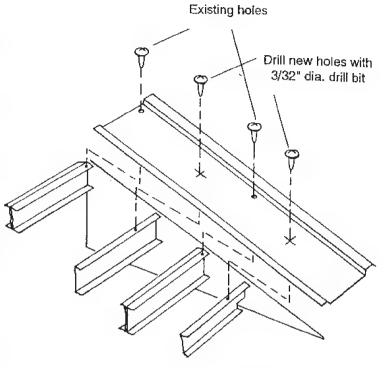
1 Install right roof panel at right rear corner of the building. Fasten this right roof panel to the beams as shown in the standard assembly instructions.

2Using a 3/32" diameter drill bit, drill a hole through the roof panel and into the additional roof beams. Fasten the roof panel to the roof beams in these new holes using a screw and washer.

3Install the remainder of the roof panels as outlined in the Steps of the standard assembly instructions for this building with the following exception.

NOTE

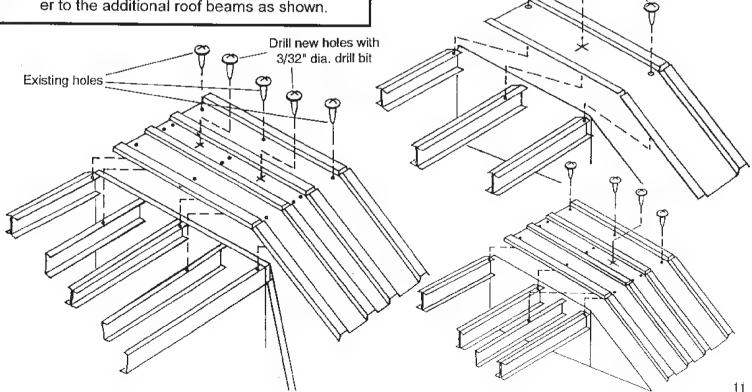
As described in item #2 of this step you *must* drill 3/32" diameter hole and fasten with screw and washer to the additional roof beams as shown



Existing holes

Drill new hole with

3/32" dia, drill bit



RBK1012

◆ Parts Needed For ◆Roof Beam Installation

- 6636 Gable Brace (8)
- 9737 Roof Beam (6)

NOTE

This step to be done in conjunction with Steps for Gables/Braces and Roof Beams in the standard assembly instructions for your building.

The roof beams packed with the standard building

The roof beams packed with the standard building and additional roof beams packed with this kit must be used, to accomplish installation.

REMINDER

If your building has already been constructed, at this point you must remove roof panels.

1 On the 10x12 Low 9" Gable, install gables as shown.

2Position **gable brace** 16" and 45 1/2" over from the main center roof beam on inside of the gable with leg pointing toward the center of the building. Cut gable brace to appropriate dimension shown, using tin snips. Mark two holes and with a 7/32" diameter drill bit, drill two holes into face of the gable. Fasten gable brace to the gable using two bolts and nuts. See diagram.

NOTE

Repeat item #2 on the other three gables.

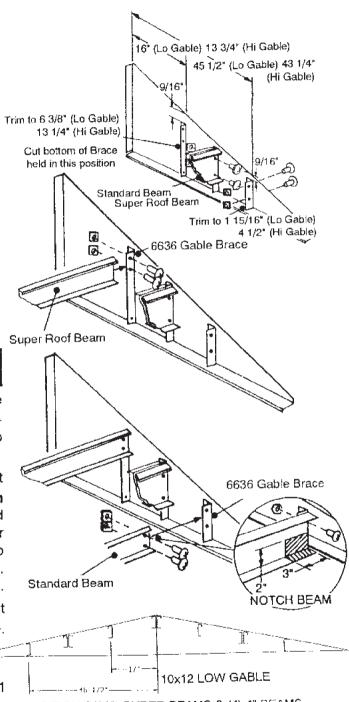
3Attach two **beef up roof beams**, back-to-back, to the center gable braces, as shown in the assembly instructions for your building, using bolts and nuts. Bolt the two beams together at six places, using bolts and nuts.

4Fasten beef up roof beam to the gable brace (at 16"), using bolts and nuts. Position beef up roof beam back-to-back, with the roof beam from the standard building as outlined in the assembly instructions for your building. Use bolts and nuts to fasten the roof beams to the legs of the roof beam brackets. Repeat on other side. Bolt the two beams together at six places, and reverse.

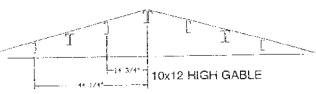
5Fasten standard roof beam to the **gable brace** (at 45 1/2"), using bolts and nuts. Repeat on other side. Notch end of beam at this location, using tin snips.

1 On the 10x12 High 17 1/2" Gable, follow Steps #1 through #5 above with the following exception. Position gable brace 13 3/4" and 43 1/4" over from the center of gable assembly on inside of the gable with leg pointing toward the center of the building.

Mark three holes and with a 7/32" diameter drill bit, drill three holes into face of gable. Fasten gable brace to the gable using three bolts and nuts.



POSITION OF (6) SUPER BEAMS & (4) 4" BEAMS



POSITION OF (6) SUPER BEAMS & (4) 4" BEAMS

Roof Panel Installation

NOTE

Each screw and bolt in the roof requires a washer

NOTE

If your building has already been constructed and you had to remove the roof panels, use the larger #10Ax1/2" screws to replace the #8Ax5/16" screws that were removed

1 Using the Roof Step in the standard assembly instructions as a guideline, position a right roof panel at the back right corner of the building.

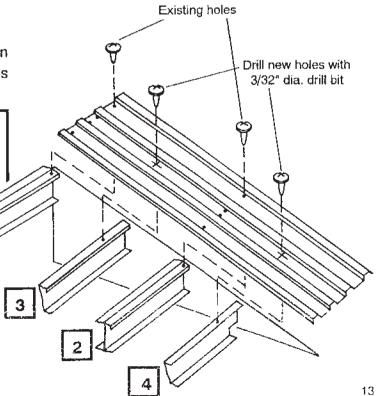
2Fasten this right roof panel to the main roof beam assembly (labeled #1 in the diagram), and to the double roof beam (labeled #2 in the diagram), using screws and washers.

3Using a 3/32" diameter drill bit, drill a hole through the roof panel and into the roof beam (labeled #3 & #4 in the diagram). Fasten the roof panel to the roof beams in these new holes using a screw and washer.

4Install the remainder of the roof panels as outlined in the Steps of the standard assembly instructions for this building with the following exception.

NOTE

As described in Item #3 of this step you *must* drill 3/32" diameter hole and fasten with screw and washer to the additional roof beams as shown.



● 6314 Roof Beam (6)

NOTE

The roof beams packed with the standard building and additional roof beams packed with this kit must be used, to accomplish installation.

REMINDER

If your building has already been constructed, at this point you must remove roof panels.

1 On the 10x13 & 10x14 High 24" Gambrel, install gables as outlined in the standard assembly instructions for your building.

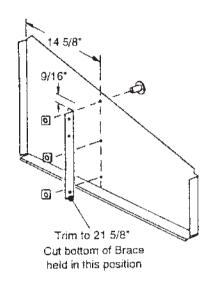
2Position gable brace 14 5/8" over from main center beam on inside of gables with leg pointing toward the center of the building. Mark three holes and with a 7/32" diameter drill bit, drill three holes into the face of the gable. Fasten gable brace to the gable using three bolts and nuts.

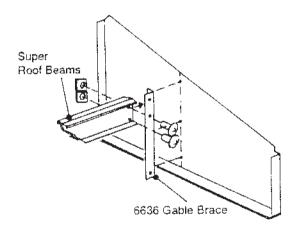
NOTE

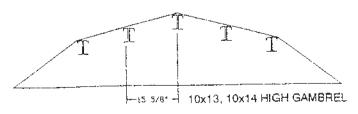
Repeat item #2 on the other three gables.

3Fasten two **beef up roof beams**, back-to-back, to the **gable brace**, using boits and nuts. Repeat on opposite side of building. Bolt beams together at six places.

4Position the remaining beef up roof beams, back-to-back, with the roof beam from the standard building as outlined in the assembly instructions for your building. Use bolts and nuts to fasten the roof beam to the legs of the roof beam brackets. Bolt beams together six places.







POSITION OF (10) SUPER BEAMS

RBK1014

◆ Parts Needed For ◆Roof Beam Installation

- 6636 Gable Brace (8)
- 6314 Roof Beam (6)

1 On the ES1014 & 697.68172, install gables as outlined in the standard assembly instructions for your building.

2Position gable brace 10 3/4" and 33 1/4" over from main center beam on inside of gables with leg pointing toward the center of the building. Mark three holes and with a 7/32" diameter drill bit, drill three holes into the face of the gable. Fasten gable brace to the gable using three bolts and nuts.

NOTE

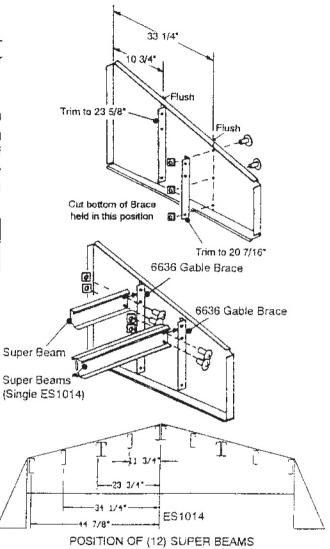
Repeat item #2 on the other three gables.

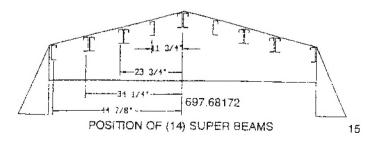
3On the ES1014, fasten single beef up roof beams, to the gable braces, using bolts and nuts. Repeat on opposite side of building.

4On the ES1014, position the remaining beef up roof beams, back-to-back, with the roof beam from the standard building as outlined in the assembly instructions for your building. Use bolts and nuts to fasten the roof beam to the legs of the roof beam brackets. Bolt beams together at six places, using bolts and nuts.

5On the 697.68172, fasten single **beef up roof beam** to the **gable brace** (at 10 3/4") using bolts and nuts. Repeat on opposite side.

6On the 697.68172, position the remaining **beef up roof beams**, back-to-back, to the **gable brace** (at 33 1/4") using bolts and nuts. Repeat on opposite side of building. Bolt beams together, using 6 bolts and nuts.





RBK1014

Roof Panel Installation

NOTE

Each screw and bolt in the roof requires a washer

NOTE

If your building has already been constructed and you had to remove the roof panels, use the larger #10Ax1/2" screws to replace the #8Ax5/16" screws that were removed

Install right roof panel at right rear corner of the building. Fasten this right roof panel to the beams as shown the standard assembly instructions.

2Using a 3/32" diameter drill bit, drill a hole through the roof panel and into the additional roof beams. Fasten the roof panel to the roof beams in these new holes using a screw and washer.

3Install the remainder of the roof panels as outlined in the Steps of the standard assembly instructions for this building with the following exception.

NOTE

As described in item #2 of this step you *must* drill 3/32" diameter hole and fasten with screw and washer to the additional roof beams as shown.

